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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/535,266

05/16/2005

Hiroshi Watanabe

MAT-8684US

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EXAMINER

SCHATZ, CHRISTOPHER T

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

05/12/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/535,266	<b>Applicant(s)</b> WATANABE, HIROSHI	
	<b>Examiner</b> CHRISTOPHER SCHATZ	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 13 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## FINAL REJECTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et al. (JP-2002268577) in view of Chung (6496373), and further in view of Kim et al. (US 20030025427).

3. As to claim 1, Kaneko et al. discloses a method of manufacturing a plasma display device having a panel in which a pair of substrates having transparency at least on a front side, the substrates being oppositely disposed so that discharge space and discharge cells are formed between the substrates, and a metallic holding plate 3 that supports the panel via a thermal conductive material (see the machine translation, [0002], [0006] and [0019]) the method comprising: forming a pull-to-remove type adhesive 50, which are thermally conductive in order to allow heat to travel from the panel to the chassis; applying the adhesive to panel 1B and the holding plate 3 and bonding the panel to the holding plate together ([0023]). Kaneko et al. does not disclose that the adhesive is cured by application of heat as well as pressure. Chung teaches using a compressible and melt-flowable thermally conductive interface that is tacky and pressure sensitive in one embodiment in order to accommodate planarity tolerances

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between the substrates and is preferably cured under heat and pressure to reduce voids in the joint (abstract, col. 2 lines 12-13 and 20-24 and col. 6 lines 26-35). The use of a curable pressure sensitive adhesive would have additionally eliminated the need to clamp the components together. It would have been obvious to one of ordinary skill in the art at the time of invention to use the heat and pressure-curable pressure sensitive adhesive disclosed by Chung as the pressure sensitive adhesive disclosed by Kaneko et al. in order to form a joint that accommodates planarity tolerances between the substrates and has a reduced number of voids as well as to eliminate the need for clamping the components together after assembly.

Kaneko et al. does not disclose a groove in which a portion of the adhesive flows is formed at a periphery of the holding plate. However, Kim et al. teaches forming a plurality of projections on the chassis base to enlarge the attaching area of heat conductive media 24 (24 corresponds to the adhesive tape disclosed by Kaneko et al). It would have been obvious at the time of invention to one of ordinary skill in the art to apply grooves to the chassis disclosed by Kaneko et al. as taught by Kim et al. in order to enlarge the attaching area.

As to claim 2, the pressure sensitive adhesive tapes are arranged on the width of the chassis and the panel and holding plate are bonded together (see [0008] and [0019] of the machine translation). Kaneko et al. is silent as to the method of bonding. However, Chung teaches bonding under heat and pressure simultaneously in order to reduce the number of voids and cure the adhesive (abstract, col. 2 lines 12-13 and 20-24 and col. 6 lines 26-35). It would have been obvious to one of ordinary skill in the art

at the time of invention to cure the pressure sensitive adhesive described in the rejection of claim 1 under simultaneous pressure and heat as taught by Chen in order to prevent the formation of voids.

### ***Allowable Subject Matter***

Claims 13 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The reasons said claims constitute allowable subject matter can be found in section 8 of the office action dated July 31, 2007.

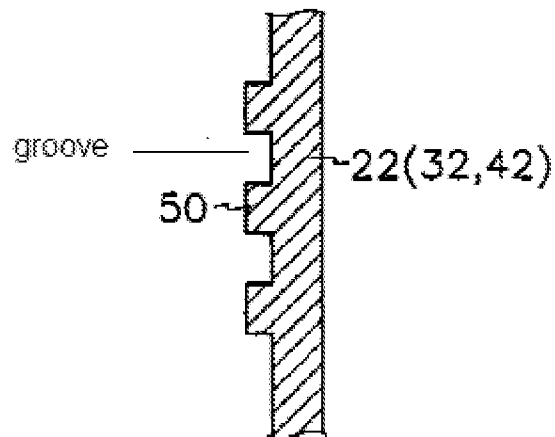
### ***Response to Arguments***

4. Applicant's arguments filed October 31, 2007 have been fully considered but they are not persuasive. Applicant argues that the groove 14B of the instantly claimed invention prevents adhesive from leaking to the periphery of the chassis member. The applicant should note that while the specification describes the function of the groove in such a manner, the claim does not recite that the groove prevents adhesive from leaking to the periphery. Rather the claim only requires that the groove be formed at the periphery of the holding plate, and that adhesive flow into the groove. It is noted that limitations recited in the specification are not read into the claims.

The applicant further states that the prior art of record does not disclose a groove. The applicant is respectfully notified that formation of a plurality of projections

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forms a groove *between* each of the projections. To illustrate this groove, the examiner has attached a marked up version of figure 7 from Kim below.



Thus, the examiner asserts that Kim does disclose a groove. The examiner further asserts that Kaneko in view of Chung and Kim renders the limitation "wherein a groove in which a portion of the adhesive flows is formed at a periphery of the holding plate" obvious.

### **Conclusion**

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **CHRISTOPHER SCHATZ** whose telephone number is **571-272-6038**. The examiner can normally be reached on Monday through Friday 9 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/CHRISTOPHER SCHATZ/  
Examiner, Art Unit 1791

/Richard Crispino/  
Supervisory Patent Examiner, Art Unit 1791